

EASINGTON RURAL DISTRICT

REPORT

OF THE

MEDICAL OFFICER OF HEALTH

For the Year ending December 31, 1898

WINGATE,
February, 1899.

Gentlemen,

I beg to submit to you my Report of Sanitary Work and Vital Statistics for the year ending 31st December, 1898.

During the year, 724 deaths occurred, and 1430 births were registered.

The death rate was 18.51 per thousand of population, against 20.14, the average for the previous eighteen years.

The birth rate was 35.57 per thousand of population, against 40.51, the average for the previous eighteen years.

The death rate is 52.03 per cent. of the birth rate, against 50.12, the average for the previous eighteen years.

The number of deaths under five years of age was 348, being 48.08 per cent. of the total deaths, against 52.68, the average for the previous eighteen years.

The number of deaths under one year to one thousand births was 172, against 165, the average for the previous seventeen years.

27 deaths were of persons over 80 years of age : 11 males with an average of 86 years, and 16 females with an average of 84 years.

48 deaths were certified by Coroner's Inquest or order, a marked decrease on previous years.

Of the 64 deaths at Easington, 34 were at the Workhouse ; one a young infant ; six middle-aged persons from phthisis ; and the rest mostly from diseases incident to old age.

The deaths from the principal zymotic diseases were 1.15 per thousand of population, against 2.27, the average for the previous seventeen years. They were :—

		Under 5	Over 5	Total
Measles ...	...	2	...	2
Whooping Cough	..	11	...	11
Scarlatina ...	...	5	...	5
Membranous Croup	...	1	...	1
Enteric Fever ...	...	3	19	22
Continued Fever	...	...	1	1
Puerperal Fever	...	...	3	3
		—	—	—
		22	23	45

SMALLPOX.—The year began with an epidemic at Middlesborough, near by, and the utmost precautions were observed to meet cases appearing in the district. Fortunately, only one presented itself, at Hutton Henry, coming direct from the infected centre. It was promptly removed to the Infectious Hospital, the house he left was thoroughly disinfected, and no other case appeared. He had not been vaccinated, and was left pitted.

MEASLES.—In the beginning of the year there were a few cases at Seaham, the remains of an epidemic in the end of 1897. A very few cases have occurred in most of the villages in the district, but in no case has it ever amounted to an epidemic. The district has not been so free from this scourge since 1881.

WHOOPING COUGH.—In the first quarter this appeared in Wingate, and afterwards, throughout the whole year, in the district generally. It was most severe at Haswell; in every case it was of young children. In no case did it approach a severe epidemic form; the mortality from it is owing to its persistent continuity. The number of deaths from this is, however, large. It is an easily preventible disease; children affected with it are not generally confined to bed, and, when not suffering from an attack of the spasm, mix with other children, and are apparently quite well. It does not proceed from simple cold, as commonly supposed, but is an infectious disease. If parents would keep this in mind when warned, and keep infected children away from others, many lives would be saved and much trouble and expense avoided.

SCARLET FEVER.—The incidence in the district of this disease is very much the lowest on record.

Except at Thornley, where a case has not occurred for three consecutive years, it has appeared throughout the district generally, taking on an epidemic form only at Haswell. More than half the cases were in the last quarter, and, as usual, during the fine weather its existence was unusually slight. The case mortality in the different localities varied from 0 to 28 per cent., and averaged 4.2 for the entire district. Since 1878, when the district was visited by a very severe epidemic, not only are the cases becoming steadily fewer year by year, but the mortality is also getting lower. A case in a child occurred at a dairy. The utmost precautions were observed in the way of isolation and disinfection, fortunately with the full co-operation and assistance of the family, and no other case resulted from it. The district is now very free from this.

DIPHTHERIA.—Three cases of this were notified at a farm-house in Hesleden. The first case was directly imported from an infected house outside the district, the other two were members of the same family who became infected. Isolation was easily secured, and it did not spread beyond the house. For some years this disease has been remarkably absent in the district.

MEMBRANOUS CROUP.—One solitary case of this appeared at Wheatley Hill ; it was of short duration, and fatal. There were no other suspicious cases of sore throat or Scarlatina near to it in time or place.

TYPHUS FEVER.—No case of this has appeared in the district for five consecutive years.

ENTERIC FEVER.—Since 1893 there has been a steady decline of this disease in the district until this year. Its incidence per thousand of population was 1.8 while for the previous five years it was 8.1,

2.9, 2.0, 1.3 and 0.9. It was of an unusually severe type ; the case mortality was 29.8 per cent., against 20.5 in the previous year. Assuming that this is unduly raised by notifying non-fatal doubtful cases in the early stage as Continued Fever, if the case mortality of the two fevers be taken together it was 19.0 per cent., against 17.1 the previous year. Each case was separately enquired into as to its origin and the conditions surrounding it. In no instance, as was frequently the case in previous years, was there any clear evidence of cases being imported into the district, although there may have been, as the usual autumn increase began in the county generally a month earlier than in this district. No case was in any way related to milk supply. As to origin from drinking water, there were three cases, one where the only supply was bad, and which had produced a case in the same house the previous year, and two cases where bad water was drunk though a supply of good water was provided.

Of the 74 cases, they occurred in 41 houses against 34 cases in 31 houses the previous year. This is evidence of its greater virulence and higher case mortality. Of the 41 houses invaded, two were farm-houses and the rest in colliery villages. In the first two quarters the number was exactly the same as the previous year, and the number was less up to the end of August. The increase was sudden, and occurred in the months of September and October in two very small and circumscribed areas. These areas were responsible for 42 cases out of 74, a number out of all proportion to the number of houses in them. A study of the origin and spread of the 42 cases illustrates very clearly that with the most ordinary precautions, in which the public generally must assist, the existence of this disease might be very much lessened.

In January there were seven cases, five of these at Seaham in houses where the infection existed in December of the previous year. One was at Wingate, in an already infected house, and one at Haswell, a sporadic case, with no history whatever. There was no case at all in February. In March, there was one case at Seaham, in a house where it had been in January. In April, there was not any case in the district. In May there were four cases, one at Seaham in a house beyond reproach for being clean, having no drains attached to it, no enclosed yard, privy and ashpit far removed from it and being absolutely free from any condition that might account for its origin, except that the subject earned a living by going out washing, which, perhaps, is enough. At Murton, a case in a house also in every respect above suspicion, but one of those probably caused by drinking water which was not that provided. At Thornley, a case also in a clean house, with no history of any sort to account for its origin. The last case was in Wingate, a village which enjoys a notorious immunity from this disease. The case was fatal from a rare pharyngeal complication. In June and July, there was no case whatever in the district. In August, there was one case at Murton, in a house free from suspicion of insanitary surroundings, and with no history whatever. In September, there was a sudden bound to 24 cases. This was not throughout the district generally, but limited to three localities. In South Hetton, four cases in houses clean and not overcrowded. In one case only was the drinking water suspicious. At Seaham, there were five cases, three in the village and two at a farm where ashpit refuse was deposited from the village. In Wingate there were 15 cases all in one street, at Deaf Hill, an outlying boundary of the township.

In October, there were 23 cases, 15 in the same street in Wingate as the previous month, one at Hutton Henry, imported from there ; two at Thornley and one at Murton with no special history, and four at Seaham in the same streets as the month before. In November, there were seven cases, six of them in the trail of those at Seaham and Wingate. In December, of four cases, two were sporadic at Murton, and one each in the same localities at Wingate and Seaham.

Of the 74 cases, 32 (except three in one house) were scattered throughout the district generally and had no connexion with each other. The remaining 42 were confined to two spots, 13 at Seaham, in Hall Street, Vane Terrace, Cook Street and School Street, all together and parallel. They are occupied by better-class workmen, free from overcrowding, and clean. Each street is on almost a dead level on ground rising at a right angle to the length of the streets. Every house has an enclosed yard, containing ashpit, privy and a sink. The free circulation of air in a mild autumn is thus much retarded.

At Deaf Hill, in Wingate, there were 29 cases, in the months of September and October, in one street of 72 houses. These houses belong to private owners, are new, well built, with concreted floors, occupied by well-to-do workmen ; they are clean, and have back yards, walled, containing privy and ashpit (in the house with the most cases this was on the latest and most approved plan), and a trapped sink. The street is on a gradual declivity, and the houses are drained by a sewer running down the back street of each side, and which runs freely.

The origin of the outbreak in these two districts

is certainly similar to the origin in the other isolated cases. The germs of the disease have an extensive existence, and require only certain conditions for their growth and development ; these were found in a hot, dry summer. The heat, non-dispersion by virtue of small enclosed yards, and abundance of organic refuse in the shape of waste food (enteric fever is never found in poverty-stricken localities) lying about as pabulum constitue a splendid breeding-ground for any disease. Free communication between neighbours, often sympathetically assisting by washing soiled linen, amply explains a rapid and extensive spread in a limited area. Every effort was made to check the outbreak. Handbills with information were distributed ; disinfectants were dispensed, with instructions particularly for the disinfection of discharges ; but the most important precaution of all—removal to the Isolation Hospital—was strenuously resisted in every case. I have often pointed out, that when laying out new streets, when possible, instead of back yards, there ought to be a broad roadway between the houses and the offices. Hitherto, enteric fever has been regarded as a disease which could be caused only by a bad water supply ; but be the water supply ever so good, as it is in these cases, under certain conditions, if it once gets a footing, it may display an infectiousness much greater than ever was considered possible. Its malignance has been displayed this year.

CONTINUED FEVER.—The number of cases is very little above that of the previous year, and the case mortality is much less, being only 2.3 per cent., against 8.0 per cent. in 1897. There was a total absence of that confusion in the nature of the cases as often occurred in previous years. Some were

simple febricula, others (subsequently to notification) turned out to be undoubted Enteric Fever. I have taken this into consideration, when enumerating the case mortality and incidence on population, under the head of Enteric Fever. It was intimately associated with the enteric cases, and covers many of the milder ones, as may be seen by the low mortality, which was only one case.

DIARRHŒA.—This was a markedly Diarrhœa year all over the county. The deaths were mostly of children under five years, 94 per cent., and, as usual, in the third quarter, they were 7.32 per cent. of the total deaths, against 4.16 per cent., the average for the previous fifteen years. Though this number is large, and above the average, it is still less than in previous years when climatic causes operated not more severely.

PUERPERAL FEVER.—The proportion of cases to births was 0.20 per cent., against 3.80, the average for the previous five years. The mortality, however, was higher, being 100 per cent., against 50 per cent. for that period. They had no connection with each other.

The death rate from Phthisis was 2.04 per thousand of population. This is higher than in previous years, not in consequence of more deaths, but from more cases of infantile deaths, believed to be of a tubercular nature, being so returned. In support of this the death rate from respiratory diseases was 2.32 per thousand of population, which is much below the average of previous years.

The new Isolation Hospital has been in readiness during the year, with an efficient staff, and a disin-

fecting apparatus has been added. Three cases of Enteric Fever only have been received into it during the year. Unfortunately, the value of this institution has not been appreciated by the public. Had it been, the year's disease and death would have shewn a more favourable account. The old hospital is still reserved for Smallpox. One case was received into it during the year. Disinfectants are freely distributed, disinfection of houses performed by your Inspectors, more so this year than in any previous. Infected articles and bedding are burned and compensation made.

SANITARY WORK EXECUTED.—Besides maintaining in efficient repair the sewers, settling tanks, and other sanitary works belonging to the Council, your Surveyor has constructed 2,950 yards of new sewers at the following places :—

EASINGTON.—650 yards of 9-inch pipes, to drain, by a special system, three blocks of houses at the highest part of the village. Each separate house is connected by a 6-inch drain to a trapped sink in the yard.

WHEATLEY HILL.—540 yards of 12-inch pipes were laid to carry water pumped from the pit to the beck. This water formerly entered the beck at a point below the village ; it now enters the beck at a point above the village, and as its volume is very large the beck beside the village is well flushed every day, which is of very great advantage in keeping the stream sweet.

300 yards of 6-inch pipes were laid to drain new houses, at High Wheatley Hill, by 6-inch trapped sinks in the yards, and connect with the general system.

MURTON COLLIERY.—150 yards of 9-inch pipes were laid, in place of a defective and incomplete sewer, at the back of Wood's Terrace. Every house has now a trapped sink in the back yard, connected by a 6-inch branch drain.

THORNLEY.—300 yards of 9-inch pipes were laid at the back of Hartlepool Street, to receive the surface drainage from the ends of the open channels by means of gratings.

KELLOE.—150 yards of 6-inch pipes were laid for the drainage of two houses, with trapped sinks in the yards. Their drainage formerly ran into a ditch ; it now enters the Kelloe drainage system.

WINGATE.—60 yards of 15-inch pipes were laid to drain a row of houses in North Road, the first house of which only is built. It also removed a nuisance at the side of the highway. It connects with the Wingate system, and has an inspection chamber in its course, away from the roadway. 500 yards of 9-inch pipes have been laid to collect the surface and house water in the open channels of the lower streets and deliver into the beck.

CASTLE EDEN COLLIERY.—300 yards of 9-inch pipes have been laid to replace a defective and objectionable open sewer, connecting the open channels of Grey Street with the general system.

ASHPIT AND PRIVY ACCOMMODATION.—This work has been pushed forward so extensively in recent years that there is now little more to do. 10 houses at Thornley, 4 houses at Easington, and 4 houses at Cold Hesleden, have been supplied with these conveniences, the plans having been approved by your Council.

NEW PROPERTY.—At Murton 20 new houses have been built, at Deaf Hill 2 houses, at Wheatley Hill 12 houses, and at Easington 2 houses. These were all built from plans passed by your Council, and were inspected by your Surveyor. Many unsuitable plans were returned for alteration.

INSANITARY PROPERTY.—The amount of this in the district gets less every year. It was found necessary to send notices for closing orders for four houses only, at South Hetton.

SCAVENGING AND REFUSE REMOVAL.—Except at Seaham and Murton, this work is performed by the Council. The work is done fairly well in the district generally except at Wheatley Hill, where the contractor has done the cleansing very unsatisfactorily. Complaint is often made against persons depositing refuse outside the ashpit, and posters have been put out, urging that greater care be observed.

WATER SUPPLY.—The scheme for a supply to Wingate Lane, Old Wingate and High Wheatley Hill has so far advanced that the work has been let to a contractor and begun. That for Monk Hesleden has been agreed to, the contract let and also begun. The improvement of the distribution to Wheatley Hill Colliery is nearly completed. Station Town has got a good and constant supply from Wingate. The work was undertaken by the Council and is highly satisfactory and economical. South Wingate is still without a supply. The number of occupied houses is very small, and an effort is being made, by your Surveyor, to open out an old well.

One sample of water has been analysed, and found to be good.

BUTCHERS' SHOPS AND SLAUGHTER HOUSES.—These have been regularly inspected, and found to be kept in good sanitary condition.

COWSHEDS AND DAIRIES.—These have been kept under careful observation, and the conditions required for wholesomeness fully carried out. In one instance only was there a case of infectious disease found about a dairy, when efficient precautions were observed.

COMMON LODGING HOUSES.—There are three of these, all in the village of Easington. They are licensed, and regularly inspected, to insure the proper compliance with the bye-laws regulating them.

The sanitary condition of the district has been kept under observation, both by systematic and special visits by myself, and by your two Inspectors. 215 written and verbal notices have been given for the abatement of nuisances caused by inefficiently cleaned ashpits and privies, dirty yards, obstructed sinks and drains, pig sties, and deposits of refuse.

The death rate is very slightly above that of the previous year, which is much more than accounted for by the large number of deaths of infants from summer diarrhoea. The existence of infectious diseases in the district generally, excepting those of Enteric Fever at Deaf Hill and Seaham, was the most limited of any year on record, which indicates a steady improvement of the condition of the district.

A great deal of new work has been done, which, with the maintenance of existing works, implies a greater devotion, both public and private, to secure improved conditions of health and comfort,

For the correction of Table A, there were 11 deaths in the Workhouse and 5 by violence of persons not belonging to the district.

In the County Asylum, and in Hospitals, there were 13 deaths of persons belonging to the district. This reduces the death-rate to 18.41.

The area of the district is 39.940 acres.

I remain, Gentlemen,

Your obedient Servant,

JAMES ARTHUR,

L.R.C.P.E., L.R.C.S.E., D.P.H.R.C.P.E.,

Medical Officer of Health.

To the Easington Rural District Council.

(A)

TABLE OF DEATHS during the year 1898 in the EASINGTON RURAL DISTRICT, classified according to
DISEASES, AGES and LOCALITIES

NAMES OF LOCALITIES adopted for the purpose of these Statistics; public institutions being shown as separate localities.	Mortality from all Causes, at subjoined ages							(i)	Mortality from subjoined Causes, distinguishing Deaths of Children under Five Years of Age																					
	At all ages	Under 1 year	1 and under 5	5 and under 15	15 and under 25	25 and under 65	65 and upwards		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)																						
Easington	64	4	3	2	2	23	22	Under 5	1																			4	7	
								5 upwds.																						
Haswell	97	36	17		2	25	17	Under 5	2																			1	53	
								5 upwds.																						
Shotton	20	3			1	10	6	Under 5																				1	3	
								5 upwds.																						
Castle Eden, Hawthorn, Burdon, Cold Hesleden, Dalton-le-Dale	33	8	4	1	2	9	9	Under 5	2																			3	12	
								5 upwds.																						
East Murton	104	41	15	1	9	26	12	Under 5																				40	56	
								5 upwds.																						
Kelloc	17	7	2		2	5	1	Under 5																				3	9	
								5 upwds.																						
Thornley	79	33	9	1	6	18	12	Under 5																			28	42		
								5 upwds.																						
Wingate	154	63	24	7	9	36	15	Under 5																				62	87	
								5 upwds.																						
Monk Hesleden, Hutton Henry, Sheraton, Hulain, Nesbit	61	17	8	1	6	19	14	Under 5																			19	25		
								5 upwds.																						
Seaham, Seaton, Slingley ..	105	35	19	7	7	27	10	Under 5																			16	54		
								5 upwds.																						
TOTALS	724	247	101	20	46	196	114	Under 5	5	1	3	19	1	3	2	11	50	24	45	1	1	1	204	348	157	376				

(B)

TABLE OF POPULATION, BIRTHS, AND OF NEW CASES OF INFECTIOUS SICKNESS coming to the knowledge of the Medical Officer of Health during the year 1898, in the EASINGTON RURAL DISTRICT, classified according to DISEASES, AGES and LOCALITIES

Notification of Infectious Diseases Act has been in force since 4th April, 1893. The Easington Rural District Council's Infectious Hospitals are situated at Easington.

